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ABSTRACT

This study is an attempt to bring together research examining diversity initiatives in curriculum and co-curriculum with research on race-based policies, specifically the policy of affirmative action in college admissions. The study attempted to identify and confirm unique background characteristics, beliefs, and predispositions that students brought with them to college that demonstrated predictive values for attitudes about race, race relations, and the use of race in public policy. The study also examined the relationship between race-based public policy and the college environment with an emphasis on diversity curriculum and co-curriculum. Data were drawn from the Cooperative Institutional Research Program 1994 freshman survey, the Student Information Form and a 1998 follow-up conducted by the University of California, Los Angeles, Higher Education Research Institute. The total number of cases for this study was 4,365. The study used A. Satin's method of assessing the impact of college on students, the Input-Environment-Output methodological framework. The dependent variable was student opinion, after 4 years of college, on the use of race/ethnicity as a factor in college admissions. Twenty-six independent variable were used, representing student and institutional characteristics. Study findings show that student policy choice about race-based public policy is linked to many predispositions that students bring with them to the college campus. Chief among those were the student's race, political orientation, and feeling about government treatment of criminals. Even after controlling for student characteristics as they arrive on campus, diversity curriculum and co-curriculum did contribute to the development of racial policy beliefs. The study provides some support for several theories of opposition to affirmative action, but it found the most support for political ideology as an explanation for affirmative action attitudes. (Contains 6 tables and 27 references.) (SLD)

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A Look at Diversity Curriculum and Co-Curriculum

Paper for the Annual Meeting of the

American Educational Research Association

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The norm in American higher education since the Civil Rights Movement has been diversification both in terms of students served and curriculum. On some fronts this has been a hard fought battle staged by students and faculty demanding access to new programs and curriculum, but for the most part higher education institutions have opened their doors to new students and instituted a plethora of courses, activities, and programs addressing curriculum and concerns that were once completely unheard of. Certainly, these changes have earned detractors, charging among other things, that the curriculum impoverishes students, robbing them of an education that will allow them to become thoughtful and independent thinkers (Bloom, 1987) or that diversity curriculum actually creates divisions between people of different races/ethnicities that would not otherwise exist (D'Souza, 1991), and creates a climate of intolerance and political correctness that squelches free speech and lowers academic standards (D'Souza, 1991; Thernstrom & Thernstrom, 1997). While these claims are made for the most part without the support of empirical evidence, they nevertheless have had a wide hearing in the general public and in the higher education community and seem to resonate with a certain portion of the population.

A growing body of empirical evidence refutes the claims of these detractors and demonstrates the viability of diversity curriculum and co-curriculum both in terms of its potential to increase racial understanding (Astin, 1993a; Hurtado, 1996; Milem, 1994), cultural awareness (Astin, 1993a; Villalpando, 1994 as quoted in Chang, 2001), openness to diversity (Pascarella et al., 1996, Meader, 1998), and in terms of its viability in producing traditional educational benefits such as retention, satisfaction with college (Astin, 1993a; Astin, 1993b; Chang, 1999) , developing values and ethical standards (Chang, 2001), adapting successfully to change (Chang, 2001), and increasing intellectual and social self concept (Astin, 1993a, Astin, 1993b; Chang, 1999; Gurin, 1999). In addition, diversity curriculum has been empirically linked to a lowering of racial prejudice (Chang, 2000), to engagement in various forms of citizenship needed to maintain our democracy (Gurin, 1999), and to growth in active and complex thinking processes (Gurin, 1999). A recent opinion pool seems to indicate that the

public does understand for the most part the value of diversity education. In a opinion poll of registered voters conducted in 1998, seventy one percent of those polled thought that diversity education did more to bring society together than drive it apart, and sixty nine percent believed that campus activities and courses that emphasize diversity have beneficial effects for all students (Chenoweth, 1998).

While the benefits of diversity related curriculum and co-curriculum have begun to be documented, and results indicate that public opinion may match empirical evidence, the very students that served as the impetus to widen the curriculum could soon disappear from higher education to a large extent, as the most potent threat to diversity comes from challenges to affirmative action. These challenges currently looming in court cases in Washington State and Michigan will greatly reduce the numbers of minority students on campuses if results from Texas since *Hopwood* or California after the California Civil Rights Initiative (Proposition 209) are any indication. Though past programs such as ex-President Clinton's White House Initiative on Race and Racial Reconciliation and last year's New York times series on "How Race Is Lived in America" tell us that the public believes that discrimination continues to play a part in American Society and that the majority of people seek improved racial relations and a lowering of racial tension, there seems to be little public sentiment to continue with public policies such as affirmative action that were designed to address these issues.

Like the general population, today's college student seems to recognize that contention exists around race, racial issues, and race-based public policy. An overwhelming percentage of entering college freshmen believe that racial discrimination continues to be a problem in the United States. These same students to a large degree believe in the goal of promoting racial understanding (Sax, Astin, Korn, & Mahoney, 1998). Yet, it is quite possible that if asked, the majority of these students would disagree with the use of race/ethnicity as a factor in college admissions. Evidence from Sax and Arredondo (1999) indicates that this would be true at least for white/Caucasian students. In a study of college freshmen attitudes towards affirmative action, they found that among white/Caucasian

students, over fifty five percent of those who believed that racial discrimination continued to be a problem opposed affirmative action and just over fifty percent who believed that promoting racial understanding was very important or essential were opposed to affirmative action.

Just what is it that creates this break between a commitment in principle and support for policies aligned with those principles? Kluegel and Smith (1986) assert that this apparent contradiction is due to competing beliefs and ideologies, while Kravitz and Platania (1993) contend that powerful misconceptions about affirmative action can create opposition that might otherwise not exist. In looking at how attitudes about racial equality translated into policy beliefs, Sniderman, Brody, and Kuklinski (1984) found that more highly educated individuals take a broader range of considerations into account when arriving at a policy preference than do less educated people. Rather than taking more principles into consideration when arriving at a policy decision, Jackman (1981) argues that people with higher levels of education may likely learn the socially desirable principle only in the abstract without bridging that belief into specific policy actions.

THEORY AND PAST RESEARCH

Theories of Opposition to Affirmative Action

In their work examining college student opposition to affirmative action, Sax and Arredondo (1999) identified three major theories that have received research attention. These theories are Self-Interest, Political Ideology, and Prejudice/Racism.

Self-Interest

Self-interest theory holds that people will not likely support policies that they perceive as not benefiting them and possibly costing them directly. Sax & Arredondo (1999) discuss that evidence has been found to support and refute the role of self-interest in policy attitudes (See Kinder and Sears, 1981; Sears 1988 as quoted in Sax & Arredondo (1999) for discussion of how self interest does not play a role in policy decisions). Jacobson (1985) using a data set of white adult respondents, which looked at attitudes toward voting for black political candidates, busing, and affirmative action, found

that self-interest partly explains opposition to affirmative action, though the effects were not as strong as hypothesized. Kluegel and Smith (1986) assert that with the uneven distribution of economic goods, self-interest likely produces conflicting beliefs and attitudes. The privileged are more likely to believe in policies that support the status quo out of their own individual self interest, while the less privileged would tend to favor policies such as affirmative action that interrupt the status quo and individual self-interest in favor of group self-interest. Indeed, research has demonstrated both of these effects. Bobo and Kluegel (1993), in a survey of black and white adult respondents, found that group self-interest does account for support for both opportunity-enhancing programs (i.e. job training, improving education of minority children through outreach) and for equal outcome programs such as affirmative action. They also found support for individual self-interest, especially as related to equal outcomes programs, finding that those with higher incomes were less supportive of race-targeted policies while those with higher education were more supportive of race-targeted policies.

Research on student attitudes is generally supportive of the usefulness of self-interest theory in explaining opposition to affirmative action. Sax and Arredondo (1999) found that white/Caucasian and Asian American students were less supportive of affirmative action at higher family socio-economic status levels and higher levels of academic preparation. This result was reversed for African-American and Mexican American students. Using a longitudinal database, Meader (1998) found contradictory results. This study found that students whose parents had lower levels of education were more likely to oppose affirmative action programs.

Political Ideology

Studies have also linked opposition to race-based policies to political ideology, specifically that more conservative individuals are more likely to oppose affirmative action then their more liberal counterparts (Costantini & King, 1985; Sniderman et. al., 1984, 1991 as quoted in Sax and Arredondo 1999). This might be attributable to a belief that the current system is open and fair and that these programs violate the "necessary relationship between inputs (hard work and talents) and outcomes"

meaning that people get what they earn and deserve (Kluegel and Smith, 1986 p. 209). People who hold conservative beliefs are likely to see government intervention as unnatural and less likely to support such efforts, which they see as interrupting the status quo. For these individuals the current stratification system in the United States is likely seen as natural and desirable. Research on student attitudes about opposition to affirmative action supports this theory, finding that for all racial groups those with more conservative ideologies were more likely to oppose affirmative action (Sax & Arredondo, 1999).

Prejudice/Racism

Prejudice is best defined as a set of irrational beliefs that develop based on interactions with parents and the wider society during childhood socialization. The messages that are received during these interactions are that members of different racial or ethnic groups are inherently different and in the case of minorities, inferior (Allport, 1954). Prejudice is closely linked to racism. Traditional racism is the overt belief in the innate inferiority of certain races/ethnicities and avowed support for practices such as segregation and unequal treatment of those who are considered inferior (Bobo & Kluegel, 1993). Many researchers have concluded that since the Civil Rights Movement this form of racism is no longer acceptable in the United States and has been replaced by new racism or symbolic racism (For a discussion see McConahay & Hough, 1976; Sears et al., 1979, 1980, McConahay et. al, 1981), Kinder and Sears, 1981; and McConahay, 1982 as quoted in Jacobson, 1985.) Bobo and Kluegel (1993) state that new racism is "racial hostility vented indirectly" (p. 446). This form of racism is caught up in opposition to issues rather than inherent inferiority, thus it is not manifested by blatant forms of discrimination, but by more subtle forms such as opposition to race-based policies like affirmative action.

Though prejudice and racism seem likely targets for opposition to race-based policies, this has not always proven true empirically. Jacobson (1985) did find support for both old-fashioned racism and new racism, and though Sax and Arredondo (1999) were not able to directly test racism in their

study, they did find support for the notion that feelings and attitudes toward racial and ethnic minorities do contribute to racial policy attitudes. Specifically, students with the goal of promoting racial understanding, or who believed racial discrimination was still a problem, were more likely to agree with the use of affirmative action. Bobo and Kluegel (1993) assert that prejudice and racism should not be used as a stand-alone theory. While perceived discrimination was found to be a factor in policy beliefs in their study, with those who perceived that discrimination occurred more likely to agree with race-based policies, they found only slight support for racism itself as an explanatory measure of attitudes toward these policies. Bobo and Kluegel (1993) explain that rather than affirming racism as a theory, the "results cast serious doubts on the validity of classifying any items measuring attitudes toward policy as a measure of racism or prejudice" (p. 460).

Development of Attitudes Toward Race-Based Policies

Given the apparent lack of coherence between principles and policy beliefs when it comes to race-based policies, it might seem that the American public lacks thoughtfulness when it comes to these policies. Sniderman, Brody, and Kuklinski (1984) assert that while average American's knowledge of politics is threadbare and might lead the public to have principles without supporting the policies to realize the principle, quite possibly the lack of coherence between principle and policy might be the result of having thought issues through. In a study examining data from the 1972 and 1976 National Election Studies, they found that adults with lower levels of education actually had policy preferences that were more directly correlated to specific principles, while adults with higher levels of education took a broader range of considerations into account when arriving at a policy preference. Sniderman, Brody, and Kuklinski (1984) conclude this is because education strengthens the capacity of individuals to make connections among all of their ideas, beliefs, and attitudes. The reasoning from this theory, and the evidence supporting it, suggests that those with higher levels of education develop policy preferences based on the totality of their beliefs, having strengthened their capacity for serious reflection.

OBJECTIVE

The current research is an attempt to bring together research examining diversity initiatives in curriculum and co-curriculum with research on race based policies, specifically looking at the policy of affirmative action in admissions. Research on race-based policy issues such as affirmative action has focused mainly on competing theories for opposition to affirmative action, with few studies focusing on student attitudes (e.g. Sax & Arredondo, 1999; Meader, 1998). This research includes variables to further test these theories with students, but moves beyond examining opposition to examining how the college environment impacts student choices in bridging principle into practice in policy beliefs.

This study seeks to:

1) Identify and confirm unique background characteristics, beliefs and pre-dispositions that students bring with them to the college environment which have demonstrated predictive value for attitudes about race, race relations and the use of race in public policy.

2) Having identified and controlled for input variables, this study examines the relationship between race-based public policy and the college environment with an emphasis on diversity curriculum and co-curriculum.

Though both objectives are important in studies exploring issues in new ways, it is the second objective of examining the relationship between diversity curriculum and co-curriculum and race-based public policy that drives this research. While much is becoming known empirically about the impacts of diversity, little is known about the potential of diversity curriculum and co-curriculum to impact student attitudes about the use of race-based public policies and how these experiences might allow students to bridge beliefs in principle into practice through policy. It is thought that the educational benefits of diversity, both in terms of increasing commitment to the principles associated with race and difference and educational outcomes such as demonstrated growth of complex thinking

skills, and more careful consideration of arguments and facts in the development of values and ethnics, that students who participate in diversity courses and activities will show a greater propensity to bridge their commitments in principle into direct policy beliefs.

DATA SOURCES AND METHODS

The data utilized in this study is drawn from the Cooperative Institutional Research Program (CIRP) 1994 freshmen survey, the Student Information Form (SIF) and the 1998 follow up survey, the College Student Survey (CSS), conducted by the UCLA Higher Education Research Institute (HERI). Individual colleges administer the SIF and freshmen complete the SIF during orientation or the first few weeks of classes. The SIF contains a wide variety of student characteristics and other demographics about the student, their family and the college they attend. It also contains information on expectations of college, student attitudes, values, life goals, self-concepts and career aspirations. The CSS is mailed by the college to students' home addresses four years later. The CSS repeats many of the questions on the SIF about attitudes, values, life goals, self-concepts and career aspirations. In addition, it asks students to report on their college experiences and activities and to reflect on their perceptions of college. (See HERI for a copy of both surveys and a complete description of the sampling procedure). Only first-time, full-time students in 1994 who completed both surveys were included in the sample, thereby creating a national, longitudinal database. The sample used for the current study includes 5,326 students from 117 colleges and universities. The total number of cases for this study is 4,365. Cases were lost through stepwise deletion.

Methodology

The study employs Alexander Astin's method of assessing the impact of college on students. This method, referred to as the Input-Environment-Output (I-E-O) methodological framework, allows for the assessment of student pre-college characteristics and college environments on outcomes. This methodological framework controls for input of pre-college characteristics and beliefs such as race, mother's educational level, and having the goal of promoting racial understanding, so that the study

can measure the impact of the environment on student outcomes or the dependent variable (Astin, 1991). This model uses blocked stepwise regression to separate by time sequence first input and then environmental variables based on when they could affect students. In the absence of a true experimental design, Astin's method of assessing the impact of college has proven reliability and validity (Astin, 1991, 1993b).

Variables[1]

Dependent Variable

The dependent variable used in this study was student opinion after four years of college, on the use of race/ethnicity as a factor in college admissions. Students were asked to rate their agreement with the statement "race/ethnicity should be used as a factor in college admissions" on a four-point scale: Strongly Agree to Strongly Disagree. This is a politically and racially charged dependent variable that allows this study to get to the heart of the intersection of race and public policy. If curriculum and co-curriculum can assist students to think in a more sophisticated and critical manner about issues of race and the use of race in public policy, then it is expected that this dependent variable will assess this.

Independent Variables -Input

Twenty-six independent variables were chosen for this study. In order to meet the objectives of this study, the independent variables chosen closely match Astin's (1993a) study, which assessed the impact of diversity and multiculturalism on a host of student outcome measures and Sax's and Arrendondo's (1999) study which looked at what shapes freshmen student attitudes about affirmative action.

Student Background Characteristics

The first block contains student background characteristics such as race, mother's educational level, gender and high school GPA. Numerous studies have found that these entering student

[1] See Appendix A for a complete list of variables used in this study.

characteristics predict student attitudes about race related issues (Astin, 1993b; Bobo & Kluegel 1993, Chang, 1999; Jacobson, 1983, Kravitz & Platania 1993; Milem, 1992 as quoted in Milem 1994; Meader 1998, Sax & Arredondo, 1999). Specifically, in regards to student attitudes about affirmative action, these variables test the efficacy of self-interest theory in this study. Past studies about student attitudes of affirmative action, gender, race, socioeconomic status, and high school preparation have predicted student attitudes about affirmative action (Meader, 1998; Sax & Arredondo, 1999).

Student Beliefs and Goals

The second block contains input variables associated with all three theories of opposition to affirmative action. These variables are important control variables as they could predispose students toward certain types of college activities based on their pre-existing belief systems and goals. Included in this block are such variables as political orientation (political ideology), the goal to be well off financially as a result of college (self-interest), and the goal of promoting racial understanding (racism). In addition to testing the efficacy of the political ideology theory, political orientation has shown to be highly predictive of attitudes involving race (Milem, 1994).

Taken together, these two input blocks are the control variables. By controlling for the predispositions of students both in terms of their background characteristics and demographics (block #1) and their beliefs and goals (block #2), the regression equation can better assess the impact of the college environment on the dependent variable. Controlling for the input variables upfront allows environmental variables to enter the regression equation only if they can make a unique and significant contribution to the regression equation beyond what can be made with the input variables alone.

Independent Variables-Environment

Institutional Characteristics

The third block in the regression examines the impact of institutional characteristics on students. Student development research has shown that these variables affect a wide variety of student outcomes (Astin, 1977, 1993, Feldman and Newcomb, 1969, Pascarella and Terenzini, 1991 as quoted

in Milem 1994). Milem (1994) also states that these variables can be used to infer peer group effects. In this study selectivity could be said to be a measure of the peer group environment as this variable is defined as the mean SAT verbal and math score of students at each institution.

Student Activities/Courses/Experiences

The fourth block of independent variables assesses how college activities, courses, and other experiences impact students. This block contains the variables at the heart of answering the question set out in this research. Numerous studies have documented the positive impacts of participation in diversity curricular and co-curricular courses and activities, both in terms of outcomes specific to race and race relations (Astin, 1993a; Chang 2000; 2001; Hurtado, 1996; Gurin, 1999; Meader 1998; Milem, 1994) and in terms of more traditional academic outcomes (Astin, 1993a; 1993b, Chang 1999, 2001; Gurin, 1999). Diversity curricular and co-curricular activities have also been connected empirically with more positive attitudes about the use of affirmative action, specifically that white students who participated in Black studies courses or were involved in a student organization devoted to black issues were more likely to favor affirmative action (Meader, 1998). In addition to four variables directly linked to diversity curriculum and co-curriculum, this block contains a variable to measure participation in a fraternity or sorority and five variables that measure interaction across race/ethnicity. The inclusion of these variables allows this study to assess how more traditional student activities such as participation in the Greek system and unstructured interaction with students different from oneself might impact attitudes about race-based policies. See table 1 for a complete list of variables used in this block of the regression equation. Consistent with this past research on the impacts of diversity, this block includes variables to measure student interaction with other ethnic groups, participation in courses/activities dealing with diversity issues, and participation in fraternities and sororities.

Table 1
Variables of primary interest – Student Activities/Courses/Experiences

Enrolled in women's studies course
Enrolled in ethnic studies course
In racial/ethnic student organization
Attended racial/cultural awareness workshop
Interacted with other ethnic group
Had a roommate of different ethnicity
Studied with other ethnic group
Dined with other ethic group
Studied with other ethnic group
Joined a fraternity or sorority

College Student Goals/Attitude Changes

The fifth and final block includes measures of intermediate college outcomes, such as the goal of promoting racial understanding after four years of college and students self reported change in their understanding of the Nation's social problems. These variables are considered intermediate outcomes because the researcher can never be sure if the variables predict the dependent variable or the other way around since all of these variables measure potential outcomes of the college experience (Astin, 1991). Although a causal relationship between these variables and the dependent variable cannot be ascertained, these variables are included because of their potential to shed light on how the college environment impacts student understanding of race issues in public policy as measured by the dependent variable.

Analysis

Preliminary analysis consisted of cross tabs designed to gain a greater understanding of the dependent variables' relationship to key independent variables in the study. Next, blocked stepwise regression using the forward method was utilized to estimate the relationship between the independent variables and the dependent variable used in this study. Only variables that reached the critical alpha level of .01 were allowed to enter the regression equation. A cautionary note is needed here, as the

dependent variable was not directly controlled for in the regression analysis because a question about student attitudes on using race/ethnicity as a factor in admissions was not added to SIF survey until after this data was collected in 1994. Astin's (1991) I-E-O method best predicts causality between the college environment and the outcome measure when the pretest for an outcome variable can be controlled for at the beginning of the regression equation. This is because a pretest variable has proven to be the most highly predictive and robust variable in a regression equation and controlling for it up front allows the researcher to draw causal inferences about the environment with more certainty. Though causal conclusions are more difficult to draw from this study, analysis in this study demonstrates input and environmental variables that are likely to positively or negatively predict the dependent variable.

RESULTS

Descriptive Analysis – Racial Characteristics

Table 2 displays the level of agreement with the statement "race/ethnicity should be should as a factor in admissions" by race, separating white and non-white students. As in past studies about affirmative action, white students oppose affirmative action to a much larger degree than non-white students (Meader, 1998; Sax & Arredondo, 1999). Though white students opposition to using race as a factor in admissions is overwhelming, with just 15% of students agreeing strongly or somewhat, it is important to note that only 40% of non-white students favor the use of race/ethnicity as a factor in admissions. The percentage of non-white students who disagree with the use of race/ethnicity as a factor in admissions would likely decrease if this sample did not include Asian-American students as evidence demonstrates that their attitudes to affirmative action more closely match their white counterparts (Sax & Arredondo, 1999).

Table 2

Student opinion on using race/ethnicity as a factor in college admissions by race

Race/Ethnicity	Percent agreeing "somewhat" or "strongly" that race/ethnicity used be used as a factor in college admissions
White/Caucasian	15
Non-White	40

Note: All decimals have been removed.

In examining further the impact of race on student attitudes about using race as a factor in admissions, descriptive analysis shows that more structured and sustained forms of engagement in diversity related activities creates a similar pattern for both white and non-white students. Specifically, table 3 shows that increased participation in diversity related curriculum and co-curriculum is associated with increases in agreement with using race as a factor in admissions.

Table 3

Student opinion on using race/ethnicity as a factor in admissions by student race/ethnicity and diversity activity/course

	Percent agreeing "somewhat" or "strongly" that race/ethnicity used be used as a factor in college admissions		
Race/Ethnicity	Two or more Diversity activities	One diversity activity	No diversity activity
White/Caucasian	23	13	8
Non-White	45	30	21

Note: Diversity Activities/Courses denote enrolling in Women's Studies, Ethnic Studies, and involvement in a racial/ethnic student organization. All Decimals have been removed.

Descriptive Analysis – Political Orientation

A student's political orientation has been shown in past studies of student development to play a significant role in predisposing certain students toward certain types of college experiences, goals, beliefs, attitudes, and outcomes (Astin, 1993a). Specifically, in studies that examined attitudes about affirmative action, students with a more liberal political orientation were more likely to agree with the use of affirmative action then were their more conservative counterparts (Sax & Arredondo, 1999). Further, students with a more liberal political orientation were more likely to believe in goals such as promoting racial understanding (Milem, 1994). Consistent with past studies linking student's political orientation and student outcomes involving race, cross tab analysis in table 4 shows that students who consider themselves liberal are more than twice as likely to agree strongly or somewhat that race should be used as a factor in admissions.

Table 4

Student opinion on using race/ethnicity as a factor in college admissions by political orientation

Political Orientation	Percent agreeing "somewhat" or "strongly" that race/ethnicity used be used as a factor in college admissions
Conservative	11
Middle of the Road	15
Liberal	30

Note: All decimals have been removed.

Further explanation of how political orientation shapes activities and experiences of students in college that are germane to examining how participation in the college environment impacts student attitudes about using race as a factor in admissions will be discussed in the regression analysis.

Descriptive analysis – Institutional Characteristics

The seminal study of the impact of affirmative action in university admissions by Bowen and Bok (1998) demonstrates some of the apparent inconsistencies in how students think about the interplay of race and public policy. Consistent with self-interest theory one might think that students who attended the most highly selective private institutions might tend to disfavor diversity on campus given the competition these students faced in the applicant pool. This was not found to be the case. Bowen and Bok (1998) found that students at more selective private schools are more likely to approve of their institution's diversity efforts. Cross tab analysis in table 5 reveals that students who attended more selective institutions, both public and private, tend to agree with the use of race as a factor in admissions more than their counterparts at both medium and low selectivity schools. Though the percentage of agreement does not increase much for students at highly selective public institutions over their counterparts at low and medium selectivity schools, this evidence seems to discount self-interest theory as an explanation for opposition to affirmative action. These findings might be explained in part by the racial stratification that exists within institutions based on selectivity. Highly selective institutions also tend to be more diverse than their lower selectivity counterparts.

Table Five
Student opinion on using race/ethnicity as a factor in college admissions by institutional control and selectivity[a]

	Percent agreeing "somewhat" or "strongly" that race/ethnicity used be used as a factor in college admissions		
Selectivity	Low Selectivity	Medium Selectivity	High Selectivity
Private	18	14	28
Public	10	10	13

Note: [a] Selectivity is defined as SAT Verbal + SAT Math. Low selectivity denotes the lowest 30% of institutions, medium selectivity denotes the middle 40% of institutions, And high selectivity denotes the top 30% of institutions. Low selectivity <960, Medium selectivity =970-1109, and high selectivity >1110.
All decimals have been removed.

Regression Analysis

While descriptive analysis can shed some light on the relationship between student characteristics and student attitudes about the use of race as a factor in admissions, regression analysis allows for the examination of the larger question of how curriculum and co-curriculum impacts student attitudes about the use of race as factor in admissions once other variables are controlled. Student opinion on using race as a factor in admissions was regressed on each of the twenty-six independent variables. Table 6 displays simple correlations and the standardized Beta coefficients for each variable that entered the regression equation. For each of the variables, the difference between the simple correlation and the standardized Beta coefficient represents the amount of predictive power that the variable shares with other variables in the equation. In addition to discussing the final Betas, the blocked entry strategy allows for a discussion of which blocks of variables have caused significant changes to the final Beta coefficients. The discussion will highlight changes greater than a magnitude of 02 dealing with variables in block #4, since changes of this magnitude signal that the variables share some variance in common with the independent variable and variables in this block are of particular concern in this study.

Racial Background

Race coded as white/Caucasian (r=-23) has the most predictive power in the regression equation and by far the largest final Beta at 17. Still, this variable accounts for only 5% of the variance in the outcome as compared to 19% of the variance when all of the variables in the regression equation have entered. The effect of race is reduced significantly when variables from block #4 enter the regression, specifically when participation in a racial or ethnic student organization enters the regression equation. This suggests that white/Caucasian students who participate in racial or ethnic student organizations during college are much more likely to believe that race/ethnicity should be used as factor in admissions.

Other Background Characteristic Variables

Both mother's educational level (r=12), being female (r=08), and father's educational level (r=10) positively predict the dependent variable, while high school grade point average (r=05) and parental income (r=06) do not enter the regression equation. Only mother's educational level remains a significant predictor with a final beta of 05 at the end of the regression equation. This indicates that students with more educated parents and female students are more likely to have a favorable opinion of the use of race as a factor in college admissions.

Political Orientation

As mentioned earlier, a student's incoming political orientation seems to predispose them toward certain types of college experiences. In this case, four of the environmental variables (i.e. high selectivity, enrolled in women's studies course, attended a racial/cultural awareness workshops, and the 1998 goal of promoting racial understanding) lose significant predictive power when student political orientation coded liberal (r=20) enters the regression equation with a beta of 17. This means that these variables share predictive power with a liberal student orientation and that students with a liberal political orientation tend to be predisposed to certain diversity courses and activities, enrolling in a women's studies course, and attending a racial/cultural awareness workshop. At the final step in the regression, when all other variables have been controlled, having a liberal political orientation remains a significant beta at 10, suggesting that students who consider themselves liberal when they enter college are more likely to agree with using race/ethnicity as a factor in admissions regardless of their participation in the college environment.

Other Beliefs and Goals

In this block only the pre-college opinion that racial discrimination is no longer a problem does not enter the regression equation and contribute to predicting the dependent variable. Both the goal of materialism as a result of college as represented in the variable goal: Being very well off financially (r=-12), and the belief that the government has too much concern for the rights of criminals (r=-18),

predict opposition to the use of race as a factor in admissions. These two variables, goal: be well off financially final beta –07, and too much concern for rights of criminals final beta –09, lose little predictive power as the environmental variables enter the regression, suggesting that these particular goals and beliefs did not share common predictive power with environmental aspects of the regression equation.

The goal of taking part in community action while in college (r=15), and the 1994 pretest goal of promoting racial understanding (r=18) suggest support for the use of race as a factor in admissions. The 1994 goal of promoting racial understanding loses statistical significance by the beginning of block #4 when having enrolled in a women's studies course enters the regression equation. This means that this variable's predictive power is explained to such an extent by the entry of this variable, that on its own this variable no longer contributes to the regression equation. Likewise, taking part in a community action does not complete the regression equation at the critical alpha of .01. This variable loses its independent predictive power once the 1998 goal of promoting racial understanding enters the regression equation in block #5. This suggests that students who have the goal of taking part in community action before college tend to agree with using race/ethnicity as a factor in admissions because they have the goal of promoting racial understanding after completing four years of college. In all, this block almost doubles the amount of variance accounted for in the regression from 8% at the end of the first block to 14% after all variables in this block have entered the regression.

Institutional Characteristics

As discussed in the cross tab analysis, regression results suggest that students at highly selective institutions and private institutions tend to favor the use of race as a factor in admissions over their counterparts at less selective or public institutions. Of these variables, only the effect of attending a highly selective institution remains significant with a final beta of 11. Attending a private institution loses significance after having attended a racial/cultural awareness workshop enters the regression equation at the end of block #4. The peer environment created by having attended a highly selective

Table Six

Predictors of student opinion on using race/ethnicity as a factor in college admissions

Variables are shown as they entered equation (N=4365) Multiple R 44

		Beta After Controlling For				
Variable	r	Background	Beliefs/Goals	Inst. Char.	Activity/Course	Goals/Attitudes (final step)
Input						
Block #1						
White/Caucasian	-23	-24	-22	-21	-17	-17
Mother's Education	12	09	06	05	05	05
Gender: Female	08	07	*01*	*01*	*01*	*01*
Father's Education	10	07	06	*03*	*03*	*03*
Block #2						
Liberal Political Orientation	20	18	12	11	10	10
Govt: Too Much Concern for Rights of Criminals	-18	-16	-11	-10	-09	-09
Goal: Be Very Well Off Financially	-12	-13	-10	-08	-08	-07
Goal: Take Part in Community Action	15	12	07	06	05	*03*
Goal: Promote Racial Understanding	18	13	05	05	*03*	*01*
Environmental						
Block #3						
High Selectivity	17	16	12	11	10	11
Private	12	09	07	06	*04*	*03*
Block #4						
Enrolled in Ethnic Studies Course	17	16	12	11	08	06
In Racial/Ethnic Student Org.	23	16	12	11	08	06
Enrolled in Women's Studies Course	17	14	11	10	07	06
Attend In Race/Cultural Aware Workshop	17	14	10	09	05	*02*
Block #5						
Goal: Promote Racial Understanding	25	21	17	17	11	12
Slf Chg Understand Nation's Social Prob.	16	14	12	12	09	07

Note: All decimal points have been removed. Italics indicate not significant at .01 level.

institution creates the third largest standardized beta, larger than all other betas besides racial background, and the 1998 goal of promoting racial understanding after four years of college. This indicates that the peer environment of highly selective institutions, which also happen to usually be much more diverse than lower selectivity institutions, is a strong predictor of student opinion on using race/ethnicity as a factor in admissions.

Student Activities/Courses/Experiences

Of the ten variables allowed to compete for entry into the regression equation in block #4, four variables related specifically to structured diversity curriculum and co-curriculum enter the regression equation, while none of the casual interaction variables, nor the variable of joining a fraternity or sorority enters the regression. Specifically, students who enroll in a ethnic studies course (r=17) participate in a racial/ethnic student organization (r=23), enroll in a women's studies course (r=17), or attend a racial/cultural awareness workshop (r=17) are more likely to agree with the use of race as factor in admissions. Of these variables, only attending a racial/cultural awareness workshop is not significant at the end of the regression equation. This variable loses it significance at the critical alpha of 01 when the 1998 goal of promoting racial understanding enters the regression equation. This suggests that students who attend racial/cultural awareness workshops during college tend to be more disposed to using race as a factor in admissions because these students have the goal of promoting racial understanding after completing four years of college and this variable is a much stronger predictor of student opinion on using race as a factor in admissions than having attended a racial/cultural awareness workshop.

Due to intercorrelations among the variables in block #4, the effect of these variables becomes smaller as successive variables in this block enter the regression equation. Nevertheless, the relative power of the variables, enrolled in ethnic studies course final beta 06, in racial/ethnic student organization final beta 06, and enrolled in women's studies course final beta 06, indicates that these variables contribute something significant to the regression equation above and beyond the control

variables that entered the regression equation earlier. This suggests that curriculum and co-curriculum dealing with diversity issues can impact student opinion on issues at the intersection of race and public policy.

College Student Goals/Attitude Changes

As mentioned earlier, block #5 contains intermediate outcomes measures that enter the regression equation. Both the 1998 goal of promoting racial understanding after four years of college (r=25) and the student self reported change in understanding the Nation's social problems (r=16) enter the regression equation and remain significant. Because the data for these variables was gathered at the same time as data for the dependent variable in this study, it is difficult to know the direction of causality between these variables. Anotherwords, do students tend to agree with using race/ethnicity as a factor in admissions because they have the goal of promoting racial understanding after four years of college or do students have the goal of promoting racial understanding after four years of college because they agree with using race/ethnicity as a factor in admissions? Regardless of the direction, the relative power of the final betas of these two variables, 1998 goal of promoting racial understanding final beta 12, self reported change in understanding of Nation's social problems final beta 07, seems to suggest that real change has occurred for students in how they think about issues of race in public policy and that the college environment may have played a part in this change. Both of these variables also share significant predictive power with the variables in block #4 of the regression, further suggesting that the college environment has the potential to impact student understanding of the use of race in public policy by allowing students to critically engage in questions concerning our Nation's milieu.

LIMITATIONS

The main limitations of this study is it reliance on a secondary data source. This data set was not designed to study racial policy attitudes among students. Thus, this study cannot directly measure racism or self-interest nor control for other factors that might influence attitudes about race-based

policies. Instead, this study must infer racism and self-interest attitudes based on the use of proxy variables. But, these same types of variables were used in other studies about student attitudes towards affirmative action, allowing for a direct comparison with past research on student attitudes about race-based policy. Additionally, the design of this study and available variables did not provide for the direct assessment of how the learning environment in diversity curriculum and co-curriculum impacts students and how this learning translates into a greater propensity for a belief in the efficacy of race-based public policies such as affirmative action. Given the limitation mentioned earlier about the data set not allowing for the control of a pretest measure of agreement with the use of affirmative action, this study cannot make causal claims. This study can suggest with some certainty variables that likely predict student attitudes at the intersection race in public policy.

SUMMARY AND DISCUSSION

This study has shown that student policy choice about the use of race-based public policy is linked to many predispositions that students bring with them to the college campus. Chief among these are a student's race, political orientation, and their feeling about government treatment of criminals. Though these variables robustly predict student opinion about the use of race/ethnicity as a factor in admissions, this study does find that even after controlling for how students arrive on campus, diversity curriculum and co-curriculum contributes to the development of racial policy beliefs. This suggests that diversity curriculum and co-curriculum can assist student to bridge the gap between their commitments in principle and their policy attitudes.

Background Characteristics

As in past studies of student attitudes of affirmative action, white/Caucasian students are much less likely to agree with the use of race-based public policies. Likely explanations could be that white/Caucasian students believe that these policies do not benefit them, while minorities may see these policies as quite helpful. It may also be that white/Caucasian students have not experienced the discrimination encountered by their minority counterparts. This explanation is consistent with Bobo

and Kluegel (1993) who found markedly less support for affirmative action among whites who did not perceive that the unequal outcomes in society might be attributable to discrimination. Generally, these results are consistent with both self-interest and racism explanations (Jacobson, 1985), but it could also be that white/Caucasian students are more likely to believe in myths about affirmative action (Kravitz & Platania, 1993). Certainly for most college students the college environment is their first real opportunity for quality discussions and interactions about racial issues.

Socio-economic status did not play a large part in predicting student attitudes about the use of race/ethnicity as a factor in admissions. This is in stark contrast to past studies about student's affirmative action attitudes and other studies of adult attitudes of affirmative action. This result may be understandable when results from past studies are examined closely, though these studies (Bobo & Kluegel, 1993; Meader, 1998; Sax & Arredondo, 1999) have found these variables predictive, contrary results have been found about the direction of the effect – higher SES both positively predicting and negatively predicting agreement with affirmative action. Academic preparation also did not play a role in predicting student attitudes about affirmative action as it did in the Sax and Arredondo (1999) study.

As in past studies, being female is a positive predictor of agreement with affirmative action policy. Although one might attribute this finding to self-interest, specifically cooperative self-interest, anything that assists others to fight discrimination will assist me to fight discrimination, (Kuegel and Smith, 1986); ultimately this finding is better suited to a political ideology explanation, as the effect of being female loses significance when having a liberal political orientation enters the regression. Women students are more likely to be liberal than men and this better explains their tendency towards support for race-based public policies.

Student Beliefs/Goals

Consistent with past studies about affirmative action attitudes, this study strongly suggests that political ideology is a viable explanation for opposition to affirmative action. Results seem to indicate that regardless of the college environment, the political ideology of an entering student is a very good

predictor of their policy choices when it comes to race-based policies. It is not surprising that political ideology is such a robust predictor of race-based policy attitudes as this variable has generally proven to be explanatory in understanding other attitudes, goals, and beliefs involving race (see Astin, 1993a, 1993b; Milem, 1994).

This study was not able to test racism or prejudice directly, but three variables were included in this study as proxy variables: Student opinion that the government has too much concern for the rights of criminals, the goal of promoting racial understanding, and the opinion that racial discrimination is no longer a problem. It is curious that holding the view that racial discrimination continues to be a problem was not shown to predict attitudes about affirmative action as it did in the Sax and Arredondo (1999) study. Perhaps this is because such a large percentage of the current sample holds the view that discrimination continues to plague our nation. Students with the pre-college goal of promoting racial understanding show support for the use of race/ethnicity as a factor in admissions, though this support is not a significant predictor after exposure to the college environment. This result is consistent with past findings about student attitudes of affirmative action (Sax & Arredondo, 1999) and tends to support the role of racism/prejudice as an explanation.

The strong negative relationship between a belief that the government has too much concern for the rights of criminals and belief in the use of race/ethnicity as a factor in admissions is also curious. This variable was included because of the high percentage of minorities, specifically African-Americans in the criminal justice system. If students don't support the rights of criminals this could have racial underpinnings. This would then suggest that these students' opposition to race-based public policy might also be based at least in part on racism or prejudice. It could also be that this variable measures political ideology or some other attitude.

Support for self-interest as an explanation of opposition to affirmative action was also found in the variables dealing with materialism and community involvement. The strong propensity of students who desire to be well off financially as a result of college to oppose race-based policies supports the

individual self-interest theory since those who see this wealth as their future would be less likely to think that they could benefit from such a program (Kluegel and Smith, 1986). The student goal of taking part in community action supports the idea of group self interest as community actions are for the most part by definition concerned with making a difference for a group of people.

Institutional Characteristics

Students who attend more selective institutions and private institutions are more likely to agree with the use of race/ethnicity as a factor in admissions. That students at more highly selective institutions were more likely to support affirmative action seems counter to what would be expected given self-interest theory, for it is at more selective institutions that affirmative action plays a part in the admissions process. Chang (1999) found that increased student diversity on campus lead to increases in the discussion of racial issues. Given that more selective institutions also tend to be more diverse, it is likely that the environment created at these institutions allows for a critical dialogue of issues of race that would not occur at less diverse institutions. It just could be that this dialogue heightens students understanding and sophistication of issues of race in public policy.

Student Activities/Courses/Experiences – Variables of Primary Interest

On the basis of past studies looking at the impact of diversity curriculum and co-curriculum on issues involving race and diversity, and the student affirmative action attitudes study that found a positive relationship between participation in black studies courses, clubs devoted to black issues and affirmative action attitudes (Meader, 1998), it was expected that structured opportunities for engagement would produce a stronger likelihood of agreement with the use of race/ethnicity as a factor in admissions. These expectations were met as all four measures of participation in diversity curriculum and co-curriculum produced more positive responses to use of race-based policies in admissions. It might be that these courses and activities allow for quality and directed cross-racial communication dispelling myths, biases, and erroneous information and improving student's racial judgments so that they are more favorable and less stereotypic (Gilbert and Hixon, 1991). It seems

evident given the demonstrated cognitive development of diverse learning environments in the studies of Chang (2001) and Gurin (1999) that students who participate in diversity curriculum and co-curriculum experience a unique and heightened learning environment that contributes to their ability to form racial policy beliefs consistent with their examined and integrated beliefs, attitudes, and principles. This conclusion is consistent with the work of developmental psychologist Erickson (1946, 1956) who proposed that early adulthood was a unique time of personal and social identity development (as quoted in Gurin, 1999). Diversity curriculum and co-curriculum seem to provide a critical opportunity for college students to develop their own integrated identities, especially when it comes to issues of race and race-based public policies.

Joining a fraternity or sorority while in college did not predict student opinion about the use of race/ethnicity as a factor in admissions. Given that this is a traditional college activity unrelated to diversity that has demonstrated negative effects on women's commitment to promoting racial understanding (Milem, 1994), that this variable did not contribute to student attitudes about race-based policy in this study may indicate that the peer environment of the Greek system itself does not play a role in shaping policy attitudes.

We might think that the positive results associated with structured diversity curriculum and co-curriculum would hold true for more casual contact between students from different races/ethnicities. In this study this has not proven to be the case. Not one of the five variables, measuring more casual interactions entered the regression equation. This tends to indicate that something unique is occurring in the structured environment when it comes to learning that is not occurring through every day interactions among students of different ethnicities. Though other research on socializing across racial groups has shown positive a impact on issues involving race relations (see Astin, 1993a, Milem, 1994), it seems that casual contact among students from different races/ethnicities in itself is not enough when it comes to race-based policy beliefs. Interestingly, Sax & Arredondo (1999) found a very slight

negative effect on support for affirmative action among white students who had socialized with someone from a different ethnic group. This effect was not replicated in this study.

College Student Goals and Attitude Changes

Though as explained earlier it is difficult to know if the goal of promoting racial understanding after four years of college or the increases in understanding of the Nation's social problems leads someone to believe in the use of race/ethnicity as a factor in admissions or the other way around, the positive relationship between these variables, after controlling for the college environment, seems to indicate that the college environment has provided a meaningful opportunity for students to engage in ways to bring our nation together through policy.

CONCLUSION

This study provides some support for all three theories of opposition to affirmative action. The findings for self-interest were mixed with some student characteristics and pre-college beliefs such as racial background and materialism supporting this theory, while other background characteristics and institutional factors such as mother's educational level and attending a highly selective school did not. This study found the most support for political ideology as an explanation for affirmative action attitudes. This is consistent with the research of Sax and Arredondo (1999) who found political ideology to be the most robust beta for all racial groups except for African-Americans. Although this study could not test prejudice and racism directly, this study does provide support for the idea that affect towards racial groups may play a role in policy decisions. This supports the idea presented by Kluegel & Smith (1986) and confirmed by Sax and Arredondo (1999) that these three theories are better seen as complementary than as competing. Certainly, as Bobo and Kluegel (1993) assert, no single attitude or predisposition guides choices about race-based policy decisions.

The educational impacts of diversity curriculum and co-curriculum are beginning to emerge empirically as researchers begin to focus their attention on the impacts of this environment. Beyond impacts tied directly to race relations - increased racial understanding (Astin, 1993a; Hurtado, 1996;

Milem, 1994), commitment to cultural awareness (Astin, 1993a; Villalpando, 1994 as quoted in Chang, 2001), and openness to diversity (Pascarella et al, 1996; Meader, 1998), and decreases in racial prejudice (Chang, 1999) - studies have now begun to demonstrate other educational benefits and academic development for students. Specifically, studies have shown benefits such as retention and satisfaction with college (Astin, 1993a, 1993b; Chang, 1999), increases in intellectual and social self-concept (Astin, 1993a, 1993b; Chang, 1999; Gurin, 1999), and growth in democratic citizenship (Gurin, 1999). Directly related to impacting thinking processes, Chang (2001) found that students who participated in diversity curriculum and co-curriculum developed values and ethical standards after more thorough consideration of arguments and facts and were better able to adapt to change. Gurin (1999) found that students in more diverse environments demonstrated growth in active and complex thinking processes.

The findings from this research add to this base, establishing the positive relationship between diversity curriculum and co-curriculum and the development of race-based policy beliefs, linking this result to other educational benefits. The work of Sniderman, Brody, and Kuklinski (1984) tells us that the educational environment increases the integration and connection of disparate ideas, beliefs, and attitudes. Results from this study, and past studies (Bobo & Kluegel, 1993; Jacobson, 1985; Kravitz and Platania, 1993; Meader, 1998; Sax & Arredondo, 1999) indicate that many attitudes and predispositions go into forming policy beliefs. Given this, and evidence about the educational efficacy of diversity curriculum and co-curriculum, it seems evident that learning environment present in diversity curriculum and co-curriculum creates a unique environment where students can explore the totality of their beliefs systems and examine them along with arguments and ideas both supportive and challenging. In this way, diversity curriculum and co-curriculum creates an opportunity for students to develop policy beliefs in concert with their examined principles, values, and ethnic.

For those opposed to affirmative action or who believe that diversity curriculum and co-curriculum amounts to "social browbeating" and is part of a larger political correctness movement,

these results may seem like one more reason to abolish this curriculum from our Nation's campuses. While their will probably always be disagreement about the need for and efficacy of affirmative action programs, certainly we can agree that policy choices are best made after careful consideration of all available evidence, including examination of and development of one's own values, beliefs, ethics and goals. Creating this type of growth is recognized by most educators to be a high priority for higher education. These finding add further evidence that diversity curriculum and co-curriculum does more than teach students to get along, it enhances student learning which is at the heart of the educational mission.

Appendix A
Complete Variable List

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Dependent Variable
Student Opinion on using race as a factor in college admissions (coded 1=strongly disagree to 4=strongly agree)

Independent Variables
Input

Student Background
Racial Background - White/Caucasian (coded 1=not marked, 2=marked)
Mother's Education (coded 1=grammar school or less to 8=graduate degree)
Father's Education (coded 1=grammar school or less to 8=graduate degree)
Parental Income (coded 1= less than 6,000 to 14=200,000 or more)
Gender (coded 1=male, 2=female)
High School GPA (coded 1=D to 8=A or A+)

Student Beliefs/Goals
Political Orientation (coded 1= far right to 5=far left)
Opinion:Govt.Too Much Concern for Rights of Criminals (coded 1=strongly disagree to 4=strongly agree)
Goal:Be Very Well Off Financially (coded 1=not important to 4=essential)
Goal:Participate in Community Action Program (coded 1=not important to 4=essential)
Goal:Promote Racial Understanding (coded 1=not important to 4=essential)
Opinion:Racial Discrimination No Longer a Problem (coded 1=disagree strongly to 4=agree strongly)

Environmental

Institutional Characteristics
Selectivity (coded as SAT Verbal + SAT Math towards higher highest scores)
Institutional Control (coded 1=public, 2=private)

Student Activities/Courses/Experiences
Enrolled in Ethnic Studies Course (coded 1=not marked, 2=marked)
Enrolled in Women's Studies Course (coded 1=not marked, 2=marked)
Attended Racial/Cultural Awareness Workshop (coded 1=not marked, 2 marked)
Had a Roommate of Different Race/Ethnicity (coded 1=not marked, 2=marked)
Participated in Racial/Ethnic Student Organization (coded 1=not marked, 2=marked)
Joined a Fraternity or Sorority (coded 1=not marked, 2=marked)
Studied with Different Racial/Ethnic Group (coded 1=not at all to 3=frequently)
Dined with Different Racial/Ethnic Group (coded 1=not at all to 3=frequently)
Dated Different Racial/Ethnic Group (coded 1=not at all to 3=frequently)
Interacted with Different Racial/Ethnic Group (coded 1=not at all to 3=frequently)

College Student Goals/Attitude Changes
Goal:Promote Racial Understanding (coded 1=not important to 4=essential)
Self Change: Understanding of Nation's Social Problems (coded 1=much weaker to 5=much stronger)

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